Massachusetts Department of Environmental Protection 310 CMR 7.74: Reducing CO₂ Emissions from Electricity Generating Facilities Frequently Asked Questions (FAQ) Version 1.0 (February 2018)

The purpose of this document is to clarify and explain certain provisions of 310 CMR 7.74. Before reading this document, please review the regulation and other available background information, available on MassDEP's web site via https://www.mass.gov/guides/electricity-generator-emissions-limits-310-cmr-774. If you have questions about 310 CMR 7.74, please email william.space@state.ma.us or climate.strategies@state.ma.us.

Contents

Q1 - Which emissions are subject to a compliance obligation under 310 CMR 7.74?	L
Q2 – How will facilities know which emissions can be subject to "emergency deferred compliance?"	L
Q3 – Please provide an example illustrating how the limit on "banking" allowances will be implemented.	
Q4 – Is there a risk that outside parties, such as banks or environmental organizations, will buy up allowances and retire them (e.g., as "offsets")?	
Q5 – How will facilities comply with the requirements of 310 CMR 7.74 and the Regional Greenhouse Gas Initiative (RGGI)?	1

Q1 - Which emissions are subject to a compliance obligation under 310 CMR 7.74?

A1 – The only emissions that are subject to a compliance obligation under 310 CMR 7.74 are CO_2 emissions reported pursuant to the Regional Greenhouse Gas Initiative (RGGI) emissions reporting requirement, 310 CMR 7.70(8). MassDEP is aware that facilities may be required to report additional greenhouse gas (GHG) emissions pursuant to other regulations including the Massachusetts GHG reporting regulation, 310 CMR 7.71, and the US EPA GHG reporting regulation, 40 CFR Part 98; however, these additional emissions are not subject to a compliance obligation under 310 CMR 7.74.

Q2 – How will facilities know which emissions can qualify under the "emergency deferred compliance" provisions?

A2 – 310 CMR 7.74(6)(d) allows an electricity generating facility that emits CO_2 during an emergency that occurs during the last 45 days of a calendar year to defer, for one year, compliance for a portion or the entirety of the CO_2 emissions emitted during the emergency. Any deferred emissions must be offset in the following year on a two for one basis.

The term "emergency" is defined in the regulation. For 2018, emissions will be considered to have occurred during an emergency if they occur when ISO-NE has triggered "Master Local Control Center Procedure No. 2" that affects facilities in Massachusetts. Additional information about this procedure is available on ISO-NE's web site. Should it be necessary to provide additional or updated information about emergency deferred compliance for a particular year, MassDEP will do so well in advance of November 17, the first day during which emergency deferred compliance may apply in each calendar year (an emergency that occurs during the last 45 days of each calendar year).

Q3 – Please provide an example illustrating how the limit on "banking" allowances will be implemented.

A3 – 310 CMR 7.74(6)(f) limits the number of allowances that can be retained for use in the following compliance year (i.e., "banked"). Each March, after deducting allowances for compliance, MassDEP will deduct additional allowances from an electricity generating facility's account if the number of allowances in the account exceeds the allowable number of allowances that can be banked.

A simple way for facilities to understand how the banking limit will be applied in March 2019 is to calculate the limit from actual or projected emissions. Specifically, if the facility's account holds more than the allowable number of allowances then allowances will be deducted from the account in compliance with 310 CMR 7.74(6)(f). For 2019, the allowable number of allowances is equal to 1.025081046 times the facility's emissions, or approximately 2.5% more than the facility's emissions. This simple approach should be sufficient for facilities that wish to bank allowances without unnecessarily having excess allowances deducted pursuant to 310 CMR 7.74(6)(f).

The remainder of this response is intended for readers that want to better understand exactly how the deduction will occur in the context of the specific regulatory language. First, a detailed description of how MassDEP will follow the steps specified in 310 CMR 7.74(6)(f). is provided. Next, two examples are provided to show how the calculation would be completed for a facility that emitted 1,000,000 metric tons of carbon dioxide in 2018. A final paragraph notes that the banking limit will increase over time when expressed as a decimal (i.e., the 1.025081046 figure provided above only applies to the adjustment that will occur in March 2019).

In March 2019, MassDEP will complete the following steps required by 310 CMR 7.74(6)(f):

Step 1: Divide 223,876 by the total aggregate emissions limit for 2018, which is 9,149,979 metric tons of CO₂.

Step 2: For each facility, multiply the resulting fraction by the number of allowances in the facility's allowance registry account on March 1:

 $L = (223,876/9,149,979) \times N$, where:

L = facility's banking limit

N = number of allowances in facility's account on March 1 (before deducting allowances for compliance)

Step 3: After deducting allowances for compliance, deduct additional allowances so that the number of allowances remaining in the facility's account does not exceed the facility's banking limit, as calculated above.

For example, if a facility reports emissions of 1,000,000 tons for 2018, the following calculations would apply:

• If the facility held 1,100,000 allowances in its account on March 1, 2019, its banking limit would be 26,914 allowances.

Step 1: (223,876/9,149,979) x 1,100,000 = 26,914

Step 2: Since 100,000 (1,100,000 - 1,000,000) allowances would remain in the facility's account after deducting allowances for compliance, MassDEP would deduct additional allowances in the amount of 73,086 so that the account only held 26,914 allowances (the facility's banking limit).

• If desired, a facility with emissions of 1,000,000 tons could choose to transfer (sell) allowance until its account held an amount equal to its banking limit, so that no deduction would be required. As shown below, this would occur if the facility held 1,025,081 allowances, in which case the banking limit would be 25,081 allowances.

Step 1: (223,876/9,149,979) x 1,025,081 = 25,081

Step 2: Since emissions in this example are 1,000,000 tons, 25,081 allowances would remain after deducting for compliance, and MassDEP would not need to deduct additional allowances to enforce the banking limit of 25,081 allowances.

Step 3: Consistent with this calculation, the facility can determine the maximum number of allowances that can be held in their account on March 1 from its emissions by dividing its emissions by 1 minus the fraction specified in step 2 above. For example, if the facility's emissions are 1,000,000 tons, then

- $(1,000,000 \div (1 (223,876/9,149,979))) = 1,025,081.04$
- (Note that $(1 \div (1 (223,876/9,149,979))) = 1.02508104$, the number provided in the first paragraph of this answer.)

Once actual (or projected) emissions are known for a facility, the facility may choose to complete this calculation and then transfer (sell) allowances to other facilities until their allowance holdings do not exceed the resulting quantity. This would allow the facility to maximize the value of its allowances and avoid having additional allowances deducted pursuant to 310 CMR 7.74(6)(f).

Note that the banking limit imposed in March, 2019 is approximately equal to 2.5% (i.e., $223,876/9,149,979 \approx 0.025$). In other words, each facility can bank up to 2.5% of its allowance holdings, and the total number of banked allowances will not exceed 223,876. The process will be the same in future years, except that, as the total aggregate limit decreases by 223,876 metric tons each year, the banking limit, expressed as a percentage, will increase a small amount each year until it reaches approximately 12.5% in 2050 (223,876/1,791,019).

Please note that this response does not comprehensively address future years or the treatment of emergency deferred compliance. If necessary, this FAQ response may be revised in the future to address those issues.

Q4 – Is there a risk that outside parties, such as banks or environmental organizations, will buy up allowances and retire them (e.g., as "offsets")?

A4 – No, the regulation does not allow or provide any method for allowances to be retired by any outside parties.

Q5 – How will facilities comply with the requirements of 310 CMR 7.74 and the Regional Greenhouse Gas Initiative (RGGI)?

A5 – 310 CMR 7.74 and RGGI are two separate and distinct programs. For facilities, the requirements of the two programs are similar– for each ton of CO_2 emissions, the facility must hold an allowance. Therefore, to comply with both regulations, the facility will need to hold two different types of carbon dioxide allowances (a RGGI allowance and a 7.74 allowance). This will ensure compliance with in-state and regional emissions limits.